

Chapter 4, Ecosystems and Communities (continued)**Section 4-2 What Shapes an Ecosystem?** (pages 90-97)

This section explains how biotic and abiotic factors influence an ecosystem. It also describes what interactions occur within communities and explains how ecosystems recover from a disturbance.

Biotic and Abiotic Factors (page 90)

1. Complete the table about factors that influence ecosystems.

FACTORS THAT INFLUENCE ECOSYSTEMS

| Type of Factor | Definition | Examples |
|-----------------|------------|----------|
| Biotic factors | | |
| Abiotic factors | | |

2. What do the biotic and abiotic factors together determine? _____

The Niche (pages 91-92)

3. What is a niche? _____
4. In what ways is food part of an organism's niche? _____
5. Circle the letter of each sentence that is true about niches.
- a. Different species can share the same niche in the same habitat.
 - b. No two species can share the same niche in the same habitat.
 - c. Two species in the same habitat have to share a niche to survive.
 - d. Different species can occupy niches that are very similar.

Community Interactions (pages 92-93)

6. When does competition occur? _____
7. What is a resource? _____
8. What is often the result of direct competition in nature? _____
9. What is the competitive exclusion principle? _____

Name _____ Class _____ Date _____

10. What is predation? _____

11. When predation occurs, what is the organism called that does the killing and eating, and what is the food organism called? _____

12. What is symbiosis? _____

13. Complete the table about main classes of symbiotic relationships.

MAIN CLASSES OF SYMBIOTIC RELATIONSHIPS

| Class | Description of Relationship |
|--------------|-----------------------------|
| Mutualism | |
| Commensalism | |
| Parasitism | |

14. The organism from which a parasite obtains nutritional needs is called a(an) _____.
15. Circle the letter of each sentence that is true of parasites.
 - a. They generally weaken but do not kill their host.
 - b. They obtain all or part of their nutritional needs from the host.
 - c. They neither help nor harm the host.
 - d. They are usually smaller than the host.

Ecological Succession (pages 94–97)

16. What is ecological succession? _____

17. What is primary succession? _____

18. The first species to populate an area when primary succession begins are called _____.
19. When a disturbance changes a community without removing the soil, what follows? _____

20. An area that was once referred to as a climax community may appear to be permanent, but what might cause it to undergo change? _____

